Remarks

In view of the following remarks, reconsideration of the outstanding office action is respectfully requested.

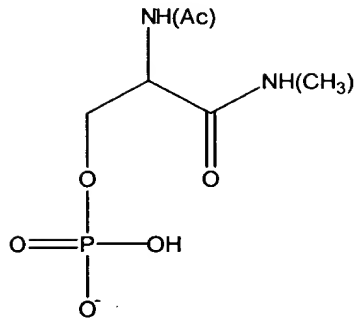
Applicant has amended claim 1 to encompass the generic concept as identified at pages 2-3 of the outstanding office action.

The rejection of claims 1, 3-7, and 12 under 35 U.S.C. § 112 (first paragraph) is respectfully traversed in view of the above amendments. The U.S. Patent and Trademark Office ("PTO") has taken the position that written descriptive support does not exist for the range-limitation present in the final "wherein" clause of claim 1. Applicant has amended the clause to recite that, under the listed conditions, "R^1 is a straight chain C10 to C30 alkyl group." Adequate written descriptive support exists for the presently claimed subgenus. In particular, in addition to the discussion of the genus of formula (I) on page 17-19 and the subgenus of formula (III) on pages 19-20, the examples disclose four species within formula (III). In particular, Example 5 describes and Figure 3 illustrates the synthesis of compounds **55** (bearing a C10 group as R^1), **56** (bearing a C14 group as R^1), **57** (bearing a C18 group as R^1), and **56a** (bearing a C10 group as R^1). These four compounds are species within the presently claimed subgenus. Applicant submits that the generic and subgeneric disclosure of formulae (I) and (III) in combination with the above-identified species falling within the presently claimed subgenus is sufficient to satisfy the written description requirement. *See Ex parte Sorenson*, 3 USPQ2d 1462 (Bd. Pat. App. & Interf. 1987). Therefore, the rejection of claims 1, 3-7, and 12 under 35 U.S.C. § 112 (first paragraph) is improper and should be withdrawn.

The rejection of claims 1 and 3 under 35 U.S.C. § 102(b) as anticipated by each of: (i) Noort et al., "Solid Phase Synthesis of Peptides Containing a Phosphoserine-Sulfur Adduct," Bioorg. Med. Chem. Lett. 6(16):2007-2012 (1996) ("Noort"); (ii) Avaeva et al., "Action of Acidic Phosphomonoesterase of Wheat Bran on the Methylamide of N-Benzoyl-O-Pyrophosphoserine," Khim. Prir. Soedin 5(6):551-554 (1969), CAPLUS Accession No. 1970: 431861 (Document No. 73:31861) ("Avaeva I"); and (iii) Avaeva et al., "Hydrolysis of Phosphoric Ester Serine Derivatives Containing Free Amino or Carboxylic Acid Groups," Vestn. Mosk. Univ. Khim. 12(5):627-8 (1971), CAPLUS Accession No. 1972:34548 (Document No. 76:34548) ("Avaeva II") is respectfully traversed.

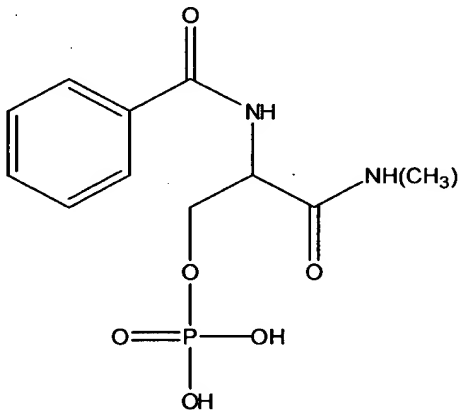
Noort teaches a phosphoserine compound (2) as a reaction intermediate in the production of peptides containing serine thioglycol phosphate. Compound (2) has the structure

shown below:



(see Scheme 1 at page 2008). Thus, when X^2 is R^1R^2N— with R^2 being H, and Q^2 is =O, R^1 at the X^2 position is methyl. The methyl group taught by Noort clearly does not fall within the limitation of a straight chain C10 to C30 alkyl group as recited in claim 1. Moreover, Noort fails to provide any teaching or suggestion to replace the methyl group with a longer alkyl group within the C10 to C30 range, and the PTO has not indicated otherwise. (It should be noted that applicants have excluded hydrogen from the scope of R^1; therefore, the PTO's interpretation of Noort set forth on page 7 of the outstanding office action is moot.) For these reasons, the rejection of claims 1 and 3 over Noort is improper and should be withdrawn.

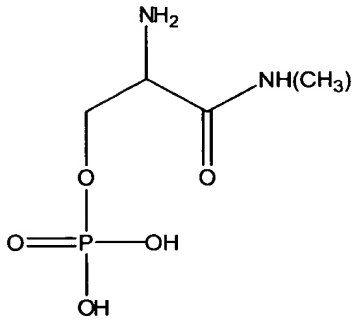
Avaeva I teaches hydrolysis of the S-enantiomer, methylamide derivative of N-benzoyl-O-phosphoserine with an extracted wheat bran acid phosphatase. The methylamide derivative has the structure shown below:



Without waiving challenge to the enablement of Avaeva I (which, unlike the full article to which the abstract corresponds, is art of record), applicants submit that Avaeva I fails to anticipate the presently claimed invention for the same reasons asserted above with respect to Noort. In particular, Avaeva I fails to teach or suggest that, when X^2 is R^1R^2N— with R^2 being H, and Q^2 is =O, R^1 at the X^2 position is a straight chain C10 to C30 alkyl group as recited in claim 1. For these reasons, the rejection of claims 1 and 3 over Avaeva I is improper.

Avaeva II teaches the hydrolysis, in mild acid or mild alkaline, of the methylamide derivative of N-benzoyl-O-phosphoserine shown above in the description of

Avaeva I as well as the hydrolysis of the methylamide derivative of phosphoserine shown below:



Without waiving challenge to the enablement of Avaeva II (which, unlike the full article to which the abstract corresponds, is art of record), applicants submit that Avaeva II fails to anticipate the presently claimed invention for the same reasons asserted above with respect to Noort and Avaeva I. In particular, Avaeva I fails to teach or suggest that, when X^2 is R^1R^2N— with R^2 being H, and Q^2 is =O, R^1 at the X^2 position is a straight chain C10 to C30 alkyl group as recited in claim 1. For these reasons, the rejection of claims 1 and 3 over Avaeva II is improper.

In view of all of the foregoing, applicants submit that this case is in condition for allowance and such allowance is earnestly solicited.

Respectfully submitted,

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